



In the United States Patent and Trademark Office

Application No.: 09/891,760
Filed: June 25, 2001
Title: SELF-ASSEMBLED MICRO ANTI-STICTION STRUCTURE
Applicant: Chuang-Chia Lin
Examiner: Tulsidas C. Patel
Art Unit: 2839

Express Mail Label # **ED 047416814 US**

Mailed **August 24, 2004**
Fremont, CA

Information Disclosure Statement

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

Dear Sir or Madam:

Attached is a completed Form PTO-1449 and copies of the pertinent parts of the references cited thereon.

It is requested that the document(s) on the enclosed form be made of record. As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

It is requested that the document(s) on the enclosed form be made of record.

Part I (Authority)

This statement is filed pursuant to:

- () 37 C.F.R. § 1.97(b).

This information disclosure statement is filed either (1) within three months of the filing date of the national applications; (2) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application; (3) before the mailing date of a first office action on the merits; or (4) before the mailing of a first Office action after the filing of a request for continued examination under § 1.114, whichever event occurs last.

Accordingly, this information disclosure statement requires no fee and no certification.

- (X) 37 C.F.R. § 1.97(c).

This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97(b), but before the mailing date of either (1) a final action under 37 C.F.R. § 1.113 or (2) a notice of allowance under 37 C.F.R. § 1.311.

Accordingly, this information disclosure statement requires either the fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) (\$180), or a certification according to 37 C.F.R. § 1.97(e).

- () 37 C.F.R. § 1.97(d).

This information disclosure statement is filed after the period specified in 37 C.F.R. § 1.97(c).

Accordingly, this information disclosure statement requires the petition fee specified in 37 C.F.R. § 1.17(p) to consider an information disclosure statement under 37 C.F.R. § 1.97(d) (\$180) and a certification according to 37 C.F.R. § 1.97(e).

Conditional Petition

It is respectfully requested that this information disclosure statement be considered, good cause being presented in Part III herein (certification). Please treat this paper as the required petition.

If this statement crosses in the mail with an office action, or is otherwise not in the indicated category of 37 C.F.R. § 1.97, it is respectfully requested that this statement be treated in the next appropriate category and made of record.

09/26/2004 JBL/INH 00000057 09891760 180.00 OP

To the extent required, please treat this paper as a conditional petition for acceptance of the information disclosure statement.



Part II (Payment)

A check is enclosed as indicated:

- ☐ No fee is due.
- ☒ The fee specified in 37 C.F.R. § 1.17(p) for submission of an information disclosure statement under 37 C.F.R. § 1.97(c) is enclosed (\$180).
- ☐ The petition fee specified in 37 C.F.R. § 1.17(p) to consider an information disclosure statement under 37 C.F.R. § 1.97(d) is enclosed (\$180).

Part III (Certification)

Pursuant to 37 C.F.R. § 1.97(e), I certify:

- ☒ No certification is necessary.
- ☐ (1) Each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement.
 - ☐ The "communication from a foreign patent office" referred to in the certification is an International Search Report, possibly issued by the U.S. Patent and Trademark Office in its capacity as an International Search Authority or International Preliminary Examining Authority.
 - ☐ The "counterpart foreign application" referred to in the certification corresponds to an ancestor or descendent application of the application for which this information disclosure statement is filed.
- ☐ (2) No item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of the statement.

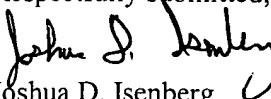
Part IV (Additional Statement)

An additional statement regarding these items of information ☐ is, ☒ is not, enclosed.

- ☒ Copies of the cited art references are enclosed,
- ☐ Copies of the cited art references _____ are of record in parent application Serial No. _____ and will be provided if the Examiner deems it convenient.
- ☐ Copies of the cited art references _____ are not required under 37 CFR 1.98(a)(2)(i) because they are U.S. Patents and/or U.S. Patent Publications and
 - ☐ the present application was filed after June 30, 2003, or
 - ☐ the present application is an international application that entered the national stage under 35 USC 371 after June 30, 2003.

Dated: 8/24/2004

Respectfully submitted,


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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE				ATTY. DOCKET NO. ONX-121		SERIAL NO. 09/891,760	
LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Chuang-Chia Lin			
				FILING DATE June 25, 2001		GROUP 2839	

O I P E J C S S E
 AUG 24 2004
 PATENT & TRADEMARK OFFICE

U.S. PATENT DOCUMENTS							
	EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A	6,523,961	2/25/2003	Ilkov et al.	353	99	12/7/2000
	B	6498,870	12/24/2002	Wu et al.	385	18	4/20/1998
	C	6,114,044	9/5/2000	Houston et al.	428	447	5/30/1997
	D	5,512,374	4/30/1996	Wallace et al.	428	422	5/9/1994
	E	5,411,769	5/2/1995	Hornbeck	427	534	9/29/1993

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES NO

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
	F	R. Legtenberg et al., "Stiction of surface micromachined structures after rinsing and drying: model and investigation of adhesion mechanisms", <u>Sensors and Actuators A</u> , 43, pp 230-238, 1994
	G	H. Guckel et al., "Fabrication of Micromechanical Devices from Polysilicon Films with Smooth Surfaces", <u>Sensors and Actuators</u> , 20, pp 117-122 (1989)
	H	R. Alley et al., "The Effect of Release-Etch Processing on Surface Microstructure Stiction", Proc. IEEE Solid-State Sensor & Actuator Workshop, Hilton Head Island, S.C., pp. 202-207 (1992)
	I	D. Kobayashi et al., "An Integrated Lateral Tunneling Unit" Proc. IEEE Micro Electro Mechanical Systems, Traravunde Germany, pp 214-219, (1992)
	J	N. Takeshima et al. Proc. Int. Conf. Solid-State Sensors & Actuators (Transducers '91), San Francisco, CA, pp. 63-66, (1991, IEEE, New York)
	K	C. Mastrangelo and C. Hsu, "Mechanical Stability and Adhesion of Microstructures Under Capillary Forces – Part I: Basic Theory" <u>Journal of Microelectromechanical Systems</u> , Vol. 2, No. 1 (March 1993) pp. 33-43
	L	C. Mastrangelo and C. Hsu, "Mechanical Stability and Adhesion of Microstructures Under Capillary Forces – Part II: Experiments" <u>Journal of Microelectromechanical Systems</u> , Vol. 2, No. 1 (March 1993) pp. 44-55

EXAMINER	DATE CONSIDERED
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* **EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.